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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,477	02/11/2002	James Lee Combs	2001-0553.01	6312

7590 03/25/2005

TAYLOR & AUST, P.C.  
12029 E. Washington Street  
Indianapolis, IN 46229

EXAMINER
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MARTIN, NICHOLAS A

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/074,477

Applicant(s)

COMBS ET AL.

Examiner

Nicholas Martin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 20-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/11/02 - 5/6/02
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. Claims 1-31 are presented for examination.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.
3. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
4. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Election/Restrictions***

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-19, drawn to a network adapter interconnecting at least one host computer and at least one peripheral device, classified in class 709, subclass 250.
  - II. Claims 20-25, drawn to a network adapter configured to receive and store status information from at least one peripheral device, classified in class 710, subclass 15.
  - III. Claims 26-31, drawn to a network adapter configured to create and store information regarding status of at least one peripheral device, classified in class 710, subclass 64.

6. The inventions are distinct, each from the other because of the following reasons:

Inventions I-III are related as subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, Invention I has separate utility such as lacking the implementation to receive and store status information and create and store information regarding status of at least one peripheral device. Invention II has separate utility such as lacking the implementation of creating status information of at least one peripheral device. See MPEP § 806.05(d). Also the restriction requirement is based on the interpretation that every dependent claim is dependent on the preceding independent claim (note Applicant's claim numbering).

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

8. Because these inventions are distinct for the reasons given above and the search required for Group I, II or III is not required for the other Groups, restriction for examination purposes as indicated is proper.

9. During a telephone conversation with the Applicant's attorney/agent (Scott Barker (859-232-3668)) on March 17, 2005 a provisional election was made without traverse to prosecute the invention of the elected group, claims 1-19. Affirmation of this election must be made by Applicant in replying to this Office Action. Claims 20-31 are

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withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-6, 8 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason et al. (hereinafter Mason), US 2002/0026491, in view of Toth, Robert James (hereinafter Toth), US 6,018,529.

12. As per claim 1, Mason teaches a computer network, comprising:

at least one host computer (Paragraphs [0011] and [0028]);

at least one peripheral device (Paragraph [0028]);

a network adapter interconnecting said at least one host computer and said at least one peripheral device (Paragraphs [0012] and [0028]).

13. Mason does not teach a computer network comprising a microprocessorless network adapter.

14. Toth teaches a computer network comprising a microprocessorless network adapter (Col. 10, lines 13-21; Col. 12, lines 50-56).

15. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Toth and Mason because they both deal with

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transmitting signals via a communication network. Furthermore, the teaching of Toth to allow a microprocessorless network adapter would improve Mason's system by limiting the associated cost and hardware complexity as a processor may not be needed for the network adapter for application specific integrated circuits.

16. As per claim 2, Mason teaches the network of claim 1, wherein said network adapter is configured to meet standard requirements for a Universal Serial Bus (USB) host (Paragraph [0025]).

17. As per claim 3, Mason teaches the network of claim 2, further comprising a USB hub interconnecting said at least one peripheral device and said network adapter (Paragraphs [0025] and [0028]).

18. As per claim 4, Mason teaches the network of claim 3, wherein said at least one peripheral device comprises a plurality of peripheral devices, said adapter being configured to support said plurality of peripheral devices (Paragraph [0028]).

19. As per claim 5, Mason teaches the network of claim 4, wherein each said peripheral device has a network address (Paragraphs [0007-0008]; and page 7, claim 7).

20. As per claim 6, Mason teaches the network of claim 5, wherein each said unique network address comprises a unique internet protocol address (Paragraphs [0003] and [0007-0008]; page 7, claim 7).

21. As per claim 8, Mason teaches the network of claim 5, wherein said adapter is configured to route data to and from said peripheral devices using said unique network addresses (Paragraphs [0007-0008] and [0031]; page 7-8, claim 7).

22. As per claim 14, Mason teaches a network adapter comprising:

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at least one application specific integrated circuit (Paragraph [0066]); and  
support electronics (Paragraph [0028]).

23. Mason does not teach a network adapter comprising wherein said adapter is microprocessorless.

24. Toth teaches a network adapter comprising wherein said adapter is microprocessorless (Col. 10, lines 13-21; Col. 12, lines 50-56).

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Toth and Mason because they both deal with transmitting signals via a communication network. Furthermore, the teaching of Toth to allow wherein said adapter is microprocessorless would improve Mason's system by limiting the associated cost and hardware complexity as a processor may not be needed for the network adapter for application specific integrated circuits.

26. As per claim 15, Mason teaches the adapter of claim 14, wherein said adapter is configured to meet standard requirements for a Universal Serial Bus (USB) host (Paragraph [0025]).

27. As per claim 16, Mason teaches the adapter of claim 14, wherein said adapter is configured to interconnect at least one peripheral device and at least one host computer (Paragraphs [0012] and [0028]).

28. As per claim 17, Mason teaches the adapter of claim 14, wherein said adapter is configured to:

detect inbound data (Paragraphs [0025-0026]);

process the inbound data (Paragraphs [0025-0026]); and

pass the processed data to at least one peripheral device (Paragraph [0028-0029]).

29. Claims 7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason and Toth, in view of Gelvin et al. (hereinafter Gelvin), US 6,832,251.

30. As per claim 7, Mason teaches the network of claim 6 further comprising a remotely attached computer including one of a device driver and a utility (Paragraphs [0037-0038]).

31. Mason and Toth do not teach the network of claim 6 comprising a remotely attached host computer.

32. Gelvin teaches a network comprising a remotely attached host computer (Col. 15, lines 27-35).

33. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Gelvin and Mason because they both deal with transmission of data of a network utilizing network adapters for peripheral devices. Furthermore, the teaching of Gelvin to allow a remotely attached host computer would improve the functionality and versatility of Mason's system by allowing for a broader range of connectivity between the host computer and the connecting devices.

34. As per claim 9, Mason and Toth do not explicitly teach the network of claim 1, wherein said network adapter is configured to manage power on said at least one peripheral.



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35. Gelvin teaches a network wherein said network adapter is configured to manage power on said at least one peripheral (Col. 14, lines 9-39; Col. 16, lines 57-67).

36. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Gelvin and Mason because they both deal with transmission of data of a network utilizing network adapters for peripheral devices.

Furthermore, the teaching of Gelvin to allow wherein said network adapter is configured to manage power on said at least one peripheral would improve Mason's system by allowing it to cycle in and out of power-down states in order to reduce power consumption for idle or non-relating peripherals.

37. As per claim 10, Mason and Toth do not explicitly teach the network of claim 1, wherein said adapter is configured to send said at least one peripheral device at least one command to go into a low-power sleep mode until said adapter detects inbound data bound for said at least one peripheral device.

38. Gelvin teaches a network wherein said adapter is configured to send said at least one peripheral device at least one command to go into a low-power sleep mode until said adapter detects inbound data bound for said at least one peripheral device (Col. 19, lines 5-36; Col. 51, lines 22-33).

39. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Gelvin and Mason because they both deal with transmission of data of a network utilizing network adapters for peripheral devices.

Furthermore, the teaching of Gelvin to allow a network wherein said adapter is configured to send said at least one peripheral device at least one command to go into

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a low-power sleep mode until said adapter detects inbound data bound for said at least one peripheral device would improve Mason's system by allowing it to reduce power consumption for idle or non-relating peripherals until data transmission is to begin.

40. As per claim 11, Mason and Toth do not explicitly teach the network of claim 1, wherein said adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data.

41. Gelvin teaches a network wherein said adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data (Col. 19, lines 5-36; Col. 30, lines 15-30).

42. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Gelvin and Mason because they both deal with transmission of data of a network utilizing network adapters for peripheral devices. Furthermore, the teaching of Gelvin to allow a network wherein said adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data would improve Mason's system by allowing it to reduce power consumption for idle or non-relating peripherals until verification of status is confirmed so that data can be transmitted successfully.

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43. Claims 12-13 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason and Toth, in view of Braun et al. (hereinafter Braun), US 6,411,276.

44. As per claim 12, Mason and Toth do not explicitly teach the network of claim 1, wherein said adapter is configured to perform automatic USB enumeration.

45. Braun teaches a network wherein said adapter is configured to perform automatic enumeration (Col. 19, lines 45-48).

46. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Braun and Mason because they both deal with interaction between a host computer and peripherals. Furthermore, the teaching of Braun to allow wherein said adapter is configured to perform automatic enumeration would improve the functionality of Mason's system by allowing for peripherals to enumerate their capabilities to the host system in order to verify status and safe transmission of data.

47. As per claim 13, Mason and Toth do not explicitly teach the network of claim 12, wherein said enumeration is performed without software.

48. Braun teaches a network wherein said enumeration is performed without software (Col. 19, lines 45-52).

49. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Braun and Mason because they both deal with interaction between a host computer and peripherals. Furthermore, the teaching of Braun to allow wherein said enumeration is performed without software would improve

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the functionality of Mason's system by increasing flexibility in the system in order to handle many different devices with differing capabilities without having to be specifically programmed.

50. Claims 18-19 do not teach or define any new limitations above claims 12-13 and therefore are rejected for similar reasons.

### ***Conclusion***

51. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Home Network Printer Adapter".

- |      |                 |                     |
|------|-----------------|---------------------|
| i.   | US 2002/0007407 | Klein, John Raymond |
| ii.  | US 2003/0140179 | Wilt et al.         |
| iii. | US 6,055,580    | Chen et al.         |

52. A shortened statutory period for reply to this Office action is set to expire in THREE MONTHS from the mailing date of this action.

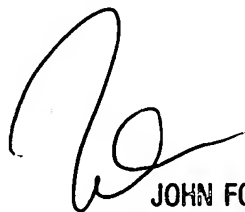
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Martin whose telephone number is (571) 272-3970. The examiner can normally be reached on Monday - Friday 8:30 a.m. - 5:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3970.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nam  
March 17, 2005



**JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**